Fort St. John Timber Supply Area
Timber Supply Review

Summary of Public Input

BC Ministry of Forests

Fort St. John Forest District
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This is a summary of the public input received on the Timber Supply Review in the Fort St. John Timber Supply Area. This summary does not assess the feasibility or validity of the input or whether it relates to the clearly defined mandate of the chief forester in the allowable annual cut determination.

104-01778/

Fort St. John Timber Supply Area

Background

As part of the review of timber supply in the Fort St. John Timber Supply Area (TSA), two opportunities were provided for public input. The first followed release of the Fort St. John TSA *Data Package* and *Information Report* in November 2000. The *Information Report* was a non-technical summary of the draft data and management assumptions that were to be applied in reviewing the timber supply for the Fort St. John TSA. A 30-day review period, ending December 29, 2000, was provided for the public to comment on these documents.

On June 25, 2002, the British Columbia Forest Service released the *2002 Fort St. John Timber Supply Area Analysis Report* and *Public Discussion Paper*. The public was encouraged to review and comment on the accuracy of the information in these documents and to provide additional information during the 60-day review period that ended August 26, 2002.

This report summarizes the input received during both public review periods. This information was provided to the chief forester for his consideration when he reviewed the allowable annual cut (AAC) for the Fort St. John TSA. The first section of this summary outlines the public review process implemented by the Forest Service, and describes the types of public input received. The second section summarizes the public input in sufficient detail to indicate the range of input received. The original submissions (with personal identifiers removed in accordance with the *Freedom of Information and Protection of Privacy Act*) can be reviewed at the Fort St. John Forest District office in Fort St. John.

Public Review Process and Response

Staff from the Fort St. John Forest District, as well as Prince George regional staff, actively solicited public input on the Timber Supply Review in the Fort St. John TSA through the following actions:

- about 75 copies of the *Data Package* and *Information Report*, and more than 100 copies of the *Analysis Report* and *Public Discussion Paper* were mailed to stakeholders in the TSA, including First Nations, licensees, local governments and environmental groups. Meetings or presentations were offered.
- the *Data Package* and *Analysis Report* were available at the district office and the Prince George regional office in Prince George. About 50 copies of the documents were picked up.
- newspaper advertisements were placed, advising of the availability of all documents for review by the public.
- copies of all the documents were made available to the local media. Interviews were conducted with the local radio and newspaper.
- referrals were made to the Ministry of Forests' website where documents were available to download.

The forest district and regional offices received three written submissions on the *Data Package* and six submissions on the *Analysis Report* (see Appendix 1).

Public Input

In this section, public input on the information presented in the Timber Supply Review documents for the Fort St. John TSA is summarized under the following headings:

- Data Package (and Information Report)
- Timber Supply Area Analysis Report (and Public Discussion Paper)
- Other comments

Data Package

Deciduous Types

Slocan-LP OSB Corporation questions the cottonwood licences referred to in Table 2 of

the *Data Package* saying they know of no such licences in the Fort St. John TSA. They express concern about how tracking of the harvest will occur, if the licence is not in fact stand-type specific but refers to the cottonwood component of newly-awarded deciduous licences.

Non-Commercial Brush
Canadian Forest Products (Canfor) expresses disagreement with the assertion that all non-commercial brush types are unlikely sites for timber production and should be removed from the timber harvesting land base (THLB). The company says a portion of these sites could and should be reforested, and provides the following reasons:

- the previous Timber Supply Review (TSR1) assumed these areas would be reforested.
- these types on mesic or subhygric sites within cutblocks are routinely and successfully reforested.
- some of the company's most successful FRDA work was done on these types.
- these sites are the result of heavy competition after natural disturbances in the past and frequently occur on the better sites.

Problem Forest Types
Slocan-LP suggests changes to Table 10 regarding types identified as leading species "not aspen." Canfor questions the removal from the timber supply analysis of Sx stands with more than 30 per cent black spruce. The company says if black spruce is the leading species, it may be appropriate to remove the stand; however, if white spruce is the leading species (regardless of the black spruce content), the stand is typically merchantable.

Canfor requests clarification about wording in Table 14 and accompanying text. They note that mixedwood stands with coniferous-leading have been logging in the past and are included in their forest development plan. The bigger question, according to Canfor's submission, is why, given the marginal economics of hauling aspen lengthy distances, no aspen-leading mixedwood types are excluded when coniferous mixedwood types are excluded.

Sites with Low Timber-Growing Potential
Slocan-LP expresses the opinion that the minimum age requirements are too low for determining the site index cut-offs for deciduous stands, saying the result will be the exclusion of stands that meet the minimum criteria but are past the priority cutting age. The company also questions the rationale for increasing the minimum site index from 13 metres in TSR1 to 18.2 metres in this Timber Supply Review (TSR2), saying this will result in a vast amount of harvestable deciduous stands being excluded from the analysis.

Slocan-LP and Canfor both question the increase in the site index cut-off for pine (from 9.4 metres in TSR1 to 14.2 metres in TSR2). Canfor says this seems unwarranted as they have demonstrated significant timber harvesting over the last five years (and have more planned) in pine stands with lower site indices than the ones proposed.

Canfor says the volume/hectare criterion for conventional ground harvesting should be reduced for spruce stands to 100 cubic metres/hectare. They offer the following reasons:

- open-grown spruce stands generally have good tree size, which is the primary limiting factor on merchantability.
- these stands have been harvested and continue to be harvested. E.g., Canfor's 2000 forest development plan has 15 cutblocks with volumes between 100 and 139 cubic metres/hectare that are ground-based clearcuts with reserves.

Canfor also says the cable/aerial volume criterion should be reduced to 200 cubic metres/hectare (from 250), and offers the following reasons:

- volume/hectare is not as important as tree

value in making these systems economic.
- consistency with demonstrated performance, since Canfor has been logging with cable systems on sites with volumes less than 250 cubic metres/hectare.

Economic Accessibility
Canfor questions the 100 per cent exclusion of certain compartments, and asks for further clarification of the rationale. The company says their experience is that no compartments have been inaccessible due to economics for coniferous timber extraction. Further, Canfor says if the excluded areas are, as indicated in the text, in the northeast portion of the TSA, there is existing oil and gas access to much of the area and it's not normally uneconomic to develop.

Environmentally Sensitive Areas
Slocan-LP expresses concern about a "double constraint" and suggests that areas of importance to wildlife (Ew1 and Ew2) should only be applied where there is no overlap with identified wildlife areas.

Roads, Trails and Landings
Canfor expresses concerns that the deductions for roads, trails and landings may be overstated, and makes the following points:
- cut permit roads and roads within cutblocks are typically reforested except for the 10-metre running surface and ditch, even if the original right-of-way may be 20 metres for slash disposal reasons.
- seismic lines are normally reforested if not used for road access.

Forest Inventory
Slocan-LP says the reliability of diameter data in the forest cover information is questionable and recommends a sensitivity analysis to address the uncertainty.

Minimum Harvestable Age
Canfor questions why the minimum harvestable age (MHA) is calculated on the age required to achieve 120 cubic metres/hectare when the minimum volume for harvesting is 140 cubic metres/hectare.

George Hauber (president, Peace River Woodlot Association) says that according to the *Data Package*, timber is supposedly mature when it reaches 120 cubic metres/hectare. He points out that much of the TSA's timber is immature pine (under 60 years old) due to fires in the 1940s, although the volume exceeds 120 cubic metres/hectare. Hauber says this timber should be considered for commercial thinning instead of clearcutting; otherwise, he says, the AAC will be very low in later years if all this area is logged when it reaches the magic number in volume instead of age.

Slocan-LP raises two concerns about the MHAs:
- the minimum volume requirement should be the same as that used to define problem forest types.
- aspen, cottonwood and deciduous-leading units should use a consistent average minimum diameter of 12.5 cm. How was the increase to 17.5 cm for cottonwood and deciduous-leading determined?

Regeneration Factors
Canfor and Slocan-LP raise a number of specific questions about regeneration assumptions:
- why is it assumed that spruce will be planted in analysis units 5 and 6 which are pure deciduous?
- units 1 to 4 do not include a component of managed deciduous regeneration. As it's expected there will be a component in most if not all regenerated coniferous stands, this should be acknowledged.
- for the last five years, all pine stands have been planted so there's been no reliance on natural regeneration in analysis unit 2.
- units 7 to 10 have been 100 per cent regenerated artificially to spruce or pine on Canfor's forest licence A18154.

Slocan-LP says it's unclear whether

not-satisfactorily restocked (NSR) areas will follow "existing" or "managed" stand yield information, and what species the NSR areas will be regenerated to.

Silvicultural Treatments
Slocan-LP says the assumption that brushing is expected in deciduous-leading analysis units is too broad. This should be applied only to units 11 to 14, according to the company.

Canfor objects strongly to the assumption that all plantations older than 10 years are not being managed. They make the following points:

- since 1987, all forest licence blocks have been managed intensively by Canfor (planted with spacing control and brushed with herbicides or manual methods).
- on pre-1987 blocks, the company estimates that 90 per cent were planted and most have been brushed and/or spaced through FRDA and FRBC projects.

Canfor says these stands must be considered as managed, and managed stand yield tables must be used to project volumes.

Utilization Standards
With regard to small pine harvests, Canfor says that while some 7.5-cm tops do come in to the mill, they believe the standard current practice would be to harvest to a 10-cm top given the distance from town of most of these stands.

Riparian Areas
Canfor makes a number of comments about management of riparian areas. With regard to lakes, the company says the vast majority fall into the L3 class, which has no reserve and a 30-metre riparian management area (RMA). Canfor says since values associated with these lakes would generally be considered relatively low, a maximum buffer of 15 metres for lakes is appropriate.

With regard to wetlands, Canfor says most of the TSA falls under the section of the regulation dealing with wetlands larger than 1000 hectares, which require no buffer or RMA. As a minimum, the company says Supply Block F should have no buffer on all wetlands.

Canfor expresses concern about the methodology used for stream classification:

- many streams on TRIM maps which would meet fish-bearing criteria in Table 12-b either do not exist at all in the field or do not meet the definition of a stream.
- in cutblocks where formal assessment have been done, most of the streams on slopes less than 20 per cent have been shown to be non-fish-bearing, usually due to a lack of suitable habitat or because they disappear before joining larger fish-bearing streams.
- applying 30-metre buffers on "fish-bearing streams" seems excessive when 90 per cent of them are classed as S4s which have no required buffer and only a 30-metre RMA.
- the 15-metre buffer on non-fish-bearing streams is incorrect; generally no buffer is applied as stream banks are protected by a five-metre MFZ (machine-free zone).

Canfor recommends a 15-metre buffer on fish-bearing streams and no buffer on non-fish–bearing streams.

Landscape Biodiversity
According to Canfor, the sensitivity analysis on the biodiversity emphasis options should be based on the resource management zones in the Fort St. John Land and Resource Management Plan (LRMP), rather than landscape units. The company says some proposed landscape units have emphasis options that contradict the LRMP's direction, and the biodiversity strategies were a key component of the compromises the forest industry made to achieve consensus in the LRMP.

Stand Level Biodiversity
Canfor requests clarification on how wildlife tree patch (WTP) percentages are to be modeled to avoid double deductions on buffered creeks that often are included as WTPs. The company suggests the deduction for

WTPs be reduced by the amount of area buffered on creeks, wetlands and lakes, since the vast majority of buffered areas in the THLB will at some time in the future be included in a WTP.

Unsalvaged Losses
Canfor says the assumption that the TSA loses 144,571 cubic metres annually to fire, from the THLB, is excessive. The company says they understand these numbers were based on gross volume over the entire land base, and maintain that since more than half the TSA is not in the THLB and since fires occur more frequently outside the THLB, this number is likely highly exaggerated. Canfor recommends accelerating the more detailed assessment of this factor, as the implications to the harvest level are significant.

Timber Supply Area Analysis Report

Deciduous Timber Harvesting Land Base
Slocan-LP OSB Corporation recommends the inclusion of certain problem forest types to provide optimum flexibility in operational planning and to examine the potential for increased harvesting in deciduous forests.

With regard to non-merchantable forest types, Slocan-LP notes that the timber supply analysis excluded almost all cottonwood- and birch-leading stands from the THLB. The company says their supplementary analysis shows that about 25,500 hectares of these stands could be included. In addition Slocan-LP says that deciduous-leading stands with a black spruce component greater than 30 per cent should not have been excluded from the THLB as at least some of these stands can be used in the OSB plant scheduled for construction.

With regard to low productivity sites, Slocan-LP says the site index cut-offs used in the analysis are very conservative. Applying the same cut-off used in the Dawson Creek TSA (10.5 metres) resulted in an additional 66,900 hectares of immature aspen stands and 27,300 hectares of aspen-pine stands being added to the deciduous THLB.

The combined effect of making the above changes is a 36 per cent increase in the deciduous THLB (to 441,600 hectares), according to Slocan-LP.

Coniferous Timber Harvesting Land Base
Canadian Forest Products (Canfor) expresses concern that the coniferous THLB has been overestimated, contributing to a significant overestimate of coniferous volumes. Canfor makes the following points.

Inventory Data
Canfor expresses concern that the TSR2 methodology may significantly overestimate the THLB. The company compared data from the Vegetation Resources Inventory (VRI) Phase I in the Halfway/Graham areas with the data used to develop the base case. Canfor says the result was that the total THLB is almost 10 per cent smaller using VRI data. The company expresses the belief that similar or greater reductions to the THLB may apply throughout the TSA, and recommends this uncertainty be recognized as a significant downward pressure on the coniferous base case harvest flow.

Inoperable Sites
Canfor notes that the amount of inoperable has decreased by 69 per cent from the TSR1, but very little information is provided regarding the methodology used. The company recommends that the uncertainty resulting from the lack of detail in operability mapping (at a scale of 1:250,000) be considered a downward pressure on the base case harvest flow.

Wildlife Tree Patches
Canfor says the two per cent reduction for WTPs is insufficient. The company points to a recent assessment of practices on 77 of their cutblocks that showed an average of 8.2 per cent of productive forest assigned to

WTPs (the retention target was 4.4 per cent). An assessment of 25 small business program blocks indicated an average WTP retention of 12 per cent and a target of 4.4 per cent. Canfor recommends this level of practice should be considered a downward pressure on the base case harvest flow.

Roads, Trails and Landings (RTLs)
Canfor notes that in TSR1 a factor of 6.39 per cent was used to account for future RTLs, and this has been reduced to 0.63 per cent in the present analysis. The company conducted two reviews of blocks completed and planned, which indicated a permanent road loss of 4.3 to 4.5 per cent within cutblocks. Canfor makes two recommendations:

- the rationale for 0.63 per cent loss for future roads be reviewed.
- the potential overestimate of the THLB (5.76 per cent) due to the impact of RTLs be considered a downward pressure on the coniferous base case.

Environmentally Sensitive Areas
Canfor expresses the opinion that terrain stability impacts on the THLB have been underestimated, based on the results of recently completed terrain stability inventories covering more than one-third of the company's five-year development plan area. The company makes two recommendations:

- 100 per cent of environmentally sensitive areas with a sensitive soil label be removed from the THLB.
- the uncertainty around the amount of unstable terrain be considered a downward pressure on the coniferous THLB.

Special Management Zones
Canfor says significant restrictions on harvesting are expected in all special management zones (SMZs), and this is not recognized in the timber supply analysis. They point to the Graham River drainage where the 11,000 hectares available for harvesting is substantially less than the THLB. Canfor recommends that these anticipated restrictions on harvesting in SMZs be recognized as a potential downward pressure on the base case harvest flow.

Area Deferrals
Canfor notes that the timber supply analysis does not consider restrictions imposed on harvesting in the Halfway River First Nation Treaty Entitlement Claim Area. The company says this area has been deferred from harvesting indefinitely and should not contribute to the THLB at this time.

Oil & Gas Exploration
Canfor expresses the opinion that the impact of current and future oil and gas activities has been significantly underestimated. The company says no reference is made to future pipeline or well-site impacts, despite heavy exploration in the region, and makes the following points:

- in 2001, Canfor staff responded to 87 new oil and gas referrals, each of which involved THLB deletions within existing plantations.
- referrals also included a number of intensive 3D seismic projects covering hundreds of square kilometres.
- the company annually purchases 30,000 to 50,000 cubic metres of salvage timber primarily from well sites and pipeline development. This suggests at least 120 to 200 hectares of productive forest land is being removed each year from the THLB.

Canfor recommends that oil and gas land base losses should be recognized as a downward pressure on the base case harvest forecast.

Existing Forest Inventory
Canfor says the results of the inventory audit indicate very significant limitations on the ability of existing inventories to accurately reflect the productivity of coniferous forests in the TSA. They make the following points about the audit:

- when only the coniferous component is considered, the average volume at 17.5-cm utilization was 27.8 per cent lower than the predicted inventory volume.
- average heights drop from 22.44 metres to 19.54 metres, which may also result in a portion of the THLB falling below minimum harvest volume criteria.
- of the 20 plots sampled, only 15 per cent of the polygons would have remained in the same inventory group.

Canfor expresses additional concern about inventory mislabeling. They cite two examples:

- stands in areas with older inventories that are typed "S" are assumed in the inventory to be primarily white spruce when in fact a portion of them are black spruce-leading.
- areas typed as pine-black spruce are frequently actually black spruce-leading, and should not contribute to the THLB.

Canfor makes two recommendations:

- the uncertainty about the accuracy of the inventory must be recognized, as it may result in significant downward pressures on the coniferous base case harvest flow.
- the urgent need to complete a VRI inventory must be confirmed.

Minimum Harvestable Ages

Slocan-LP says MHAs need to be adjusted to better reflect the commercial rotation age of deciduous stands. The company says the MHA for many analysis units seems to be higher than needed, and provides a scenario in which lowering the MHA increases the mature deciduous growing stock from 35.3 million cubic metres in the timber supply analysis to around 42 million cubic metres in their supplementary analysis.

First Nations

Land Resource Management submits a letter on behalf of several Treaty Eight First Nations with traditional territory within the Fort St. John TSA, advising that a submission is forthcoming, within the next few weeks. The letter expresses confidence that the chief forester will ensure the process includes comments that will assist the Ministry of Forests to meet the legal requirement to adequately consult First Nations, especially before any changes are made that could affect treaty and aboriginal rights.

The joint submissions from the Saulteau First Nations/West Moberly First Nations says they cannot meaningfully or effectively participate in consultations (such as the Timber Supply Review) unless they have the resources to undertake their own review and/or analysis. They express dismay that despite their repeated requests for capacity funding and despite many court decisions on the Crown's obligation to consult with First Nations, their rights, title and interests — and the legal obligations of the ministry — continue to be disregarded. The First Nations say they will insist on the Province's strict compliance with its legal obligations.

The joint submission also notes the importance of the Timber Supply Review and its impacts on their ability to exercise their Treaty and Aboriginal Rights guaranteed by Treaty 8, especially with regard to a sufficient land base to sustain their culture.

Harvest Priority

Slocan-LP says the harvest priority should be adjusted to give equal weighting to deciduous and coniferous stands. The company says there's a need to accelerate the deciduous harvest to capture older aspen stands that are on the verge of decay and deterioration or conversion to leading conifer, noting that the inventory suggests about 12 per cent of deciduous stands are currently older than 120 years. Slocan-LP also maintains that the vastly shorter regeneration delay of deciduous stands makes them a better candidate for harvest selection compared to an adjacent mature coniferous-leading stand.

Canfor says that operational harvest sequencing places little emphasis on priority harvest ages, due to the scattered distribution of merchantable timber. The company makes two recommendations:

- the sensitivity analysis in which harvest priorities were removed be recognized as the better depiction of actual harvest scheduling.
- it be recognized that harvest priorities used in the base case overestimate the sustainable harvest level by about 10 per cent.

Other Comments

Most submissions comment on factors or issues other than those specifically covered by Timber Supply Review documents. These comments are summarized in this section.

Timber Supply Review Process

Slocan-LP says the definition of analysis units in the *Data Package* is difficult to follow, and suggests consideration of a revision as the order in which the criteria are applied may affect the distribution. The company raises specific questions about the small pine analysis unit and about the approach to harvest scheduling. Slocan-LP also says it's unclear if the timber supplies for coniferous-leading stands and deciduous-leading stands will be assessed simultaneously to properly account for adjacency and seral stage requirements.

Canfor identifies a gap in the definition of one analysis unit and also makes the following recommendations regarding proposed sensitivity analyses:

- the proposed analysis of harvesting only in supply blocks A, B, C and D should not apply to the coniferous component, since Canfor has operated and continues to operate in all supply blocks.
- the "land base-volume exclusion" sensitivity issue should be reviewed. Including coniferous mixedwoods is likely of much less value than, for example, analyzing deciduous mixedwoods.
- it may be useful to analyze the impacts of retaining or not retaining spruce understory in aspen and mixedwood stands.

Tenures

In his submission, George Hauber encourages the granting of more woodlot licences, for the following reasons:

- average stumpage is more than double the provincial average.
- employment is much greater.
- money is all spent locally.
- work is distributed throughout the year, creating employment for seasonal workers from the oil and gas sector and for First Nations people.

Hirise Holdings Ltd., which operates a value-added mill at mile 65 of the Alaska Highway, outlines their need for a secure source of timber. The company has located good local and international markets for its varied products, and anticipates expansion of its activities. They are requesting tenures that would give them at least 30,000 cubic metres of coniferous and 20,000 cubic metres of deciduous wood. Hirise points out that their mill is Metis-owned and expresses the opinion that local First Nations would support any increase in harvest levels that would be going to their facility.

Harvest Levels

Slocan-LP says the TSA has a robust, underutilized deciduous resource that has the potential to be seriously eroded if not utilized quickly, at or slightly above the current AAC. The company engaged Industrial Forestry Service Ltd. to do a supplementary timber supply analysis due to concerns that the ministry's analysis did not adequately address the physiology and dynamics of deciduous and mixedwood stands in the boreal forest. Details of the supplementary analysis are provided. Slocan-LP says that although the analysis showed the potential for an increase in the

deciduous AAC, the company wants to retain this for the future so any increase can be based on new forest inventory and growth-and-yield information.

Canfor provides examples of significant discrepancies in small pine inventory typing, and recommends careful consideration of the limitations of the current inventory prior to establishment of any small pine harvest level. Overall, Canfor expresses the opinion that the current state of resource information is not reliable enough to support an increase in the coniferous AAC at this time. The company identifies numerous downward pressures as a result of uncertainties about land base and inventory data. The company recommends:

- the coniferous AAC be maintained at its current level until more reliable inventory information becomes available.
- the chief forester should identify and implement opportunities to improve the information base prior to the next Timber Supply Review.

Appendix 1

Submissions received by the Fort St. John Forest District

Submissions received on the Data Package

Forest industry
Slocan-LP OSB Corporation
Canadian Forest Products Ltd.
Geo. Hauber, president Peace River Woodlot Assoc.

Submissions received on the Timber Supply Analysis Report

First Nations
Land Resource Management (First Nations consultant)
West Moberly and Saulteau First Nations (2)

Forest industry
Hirise Holdings Ltd.
Canadian Forest Products Ltd.
Slocan-LP OSB Corporation